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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,128	12/15/2003	Osamu Tanitsu	107759.01	9142

25944 7590 03/03/2006

OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
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EXAMINER
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HARRINGTON, ALICIA M

ART UNIT	PAPER NUMBER
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2873

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/734,128	<b>Applicant(s)</b> TANITSU ET AL. 	
	<b>Examiner</b> Alicia M. Harrington	<b>Art Unit</b> 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003 and 23 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                                                |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                                               | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0104,1203</u> . | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

***Information Disclosure Statement***

1. The Examiner has considered the information disclosure statement filed on 1/23/04. The Examiner has partially considered the information disclosure statement filed on 12/15/03 because the parent application did not contains copies of the foreign references listed on the IDS. Please submit copies in your response to the action.

***Priority***

2. The Examiner could not find the priority documents in the parent application (09/703,727). Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 12/15/99, 5/26/00 and 7/31/200. It is noted, however, that applicant has not filed a certified copy of these application as required by 35 U.S.C. 119(b).

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 13 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation "the second dimension " in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "the second dimension" in line 9. There is insufficient antecedent basis for this limitation in the claim.

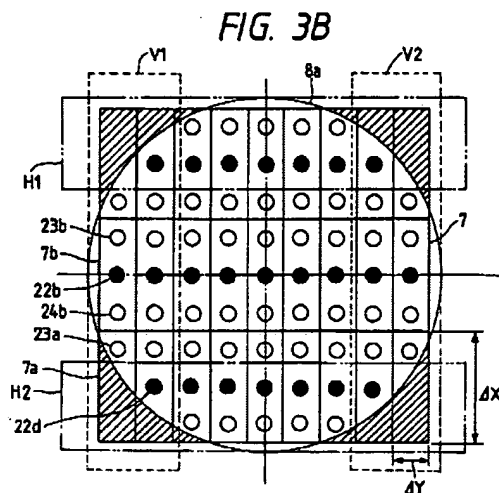
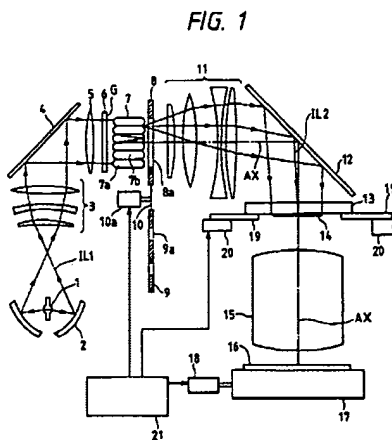
***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 –8, 13-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishi et al (US 5,815,249).



Regarding claim 1, Nishi discloses an illumination optical system for illuminating an illumination area on an illumination surface based on a light from a light source, comprising:

A wave front dividing type optical integrator (7);

A light source-enlarging member (6);

Wherein the illumination area has a slot shape (8) with a first dimension and a second dimension (see figure 3b for example-vertical and horizontal); and

Wherein the light source image-enlarging member (6) stretches the light source along the first direction corresponding to the first dimension (see col. 7, lines 60-67; col.8, lines 1-25; col. 10,lines 17-35).

Regarding claim 2, the light source image enlarging member stretches the light source images along a second direction corresponding to the second dimension, and wherein the enlarging magnification along the second direction differs from the enlarging magnification along a first direction- Col. 10,lines 5-35 teach the images are increased/depth of focus in one dimension in order to make the images in both dimension equal.

Regarding claim 3, see figure 1 and element 7.

Regarding claim 4, see figure 1 and col. 7, lines 60-67 (three images per lens).

Regarding claim 5, see col. 9,lines 5-37.

Regarding claim 6, see col. 8, lines 60-67.

Regarding claim 7, see figure 2 for example and col. 9,lines 5-37.

Regarding claim 8, see Examiner notes in claim 2.

Regarding claim 13, see figure 1; light (1), mask (13); projection optical system (15); substrate (16,17)-see col. 7-col 8, lines 1-25.

Regarding claim 14, Nishi disclose the exposure method for transferring a pattern on a mask on photosensitive substrate (see col. 8,lines 1-40).

Regarding claim 15, see Examiner notes in claim 13 and col. 8,line 1-40.

Regarding claims 16-18, see col. 8, lines 1-40.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 9-12, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishi.

Regarding claims 9-11, Nishi teaches a fly-eye integrator (7) as the wave-front dividing integrator (two dimensional). The fly eye integrator is typically made of cylindrical lenses- the Examiner takes official notice to that fact. Although, Nishi fails to specifically disclose the lenses are aspherical, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include aspherical lenses for the specific purpose of preventing lens aberration that can blur the output image.

Regarding claim 11, see figure 1 and col. 7, lines 60-67 (three images per lens).

Regarding claim 12, the light source image enlarging member stretches the light source images along a second direction corresponding to the second dimension, and wherein the enlarging magnification along the second direction differs from the enlarging magnification along a first direction- Col. 10, lines 5-35 teach the images are

increased/depth of focus in one dimension in order to make the images in both dimension equal.

Regarding claims 19-20, see col. 8, lines 1-40.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nishi (Us 5,815,248) discloses illumination optical system using a light source enlarging member and method of having a wave front splitter and optical integrator.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Harrington whose telephone number is 571 272 2330. The examiner can normally be reached on Monday - Thursday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571 272 2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to be 'AMH' with a stylized flourish.

Alicia M Harrington  
Primary Examiner  
Art Unit 2873

AMH